# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

IN THE MATTER OF:

Motorola 52<sup>nd</sup> Street Superfund Site Phoenix, Arizona

Freescale Semiconductor, Inc.

Respondent

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT

U.S. EPA Region IX CERCLA Docket No. 2010-06

Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9607 and 9622.

# ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT SOIL GAS AND VAPOR INTRUSION TO INDOOR AIR EVALUATION MOTOROLA 52<sup>ND</sup> STREET SUPERFUND SITE, OPERABLE UNIT 1

#### I. JURISDICTION AND GENERAL PROVISIONS

- 1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Freescale Semiconductor, Inc. ("Freescale" or "Respondent"). The Settlement Agreement provides for the conduct of a Soil Gas and Vapor Intrusion to Indoor Air Evaluation and other actions as provided herein in Operable Unit 1 of the Motorola 52<sup>nd</sup> Street Superfund Site ("52<sup>nd</sup> Street Site" or "Site") located in Phoenix, Arizona, and the reimbursement for associated future response costs incurred by EPA.
- 2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9607 and 9622 ("CERCLA"). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Settlement Agreement 12580, 52 Fed. Reg. 2926 (Jan. 29, 1987), and further delegated to Regional Administrators on May 11, 1994, by EPA Delegation Nos. 14-14-C and 14-14-D, and further re-delegated to Region IX Superfund Branch Chief (now titled Assistant Director) level by the Regional Administrator of Region IX on September 25, 1997.
- 3. In accordance with Sections 104(b)(2), and 122(j)(1) of CERCLA, 42 U.S.C. §§ 9604(b)(2) and 9622(j)(1), EPA notified the Arizona Department of Environmental Quality, Arizona Game and Fish Department, U.S. Department of Defense, U.S. Department of Interior, National Oceanic and Atmospheric Administration, and U.S. Department of Agriculture on September 3, 2003, and the U.S. Department of Energy on October 3, 2003 of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under federal and state trusteeship.
- 4. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of fact and conclusions of law and determinations of this Settlement Agreement. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it will not contest the basis or validity of this Settlement Agreement or its terms.

#### II. PARTIES BOUND

- 5. This Settlement Agreement applies to and is binding upon EPA and upon Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter Respondent's responsibilities under this Settlement Agreement.
- 6. Respondent is jointly and severally liable for carrying out all activities required by this Settlement Agreement.
- 7. Respondent shall ensure that its contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondent shall be responsible for any noncompliance with this Settlement Agreement.
- 8. The undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to execute and legally bind Respondent to this Settlement Agreement.

#### III. STATEMENT OF PURPOSE

- 9. In entering into this Settlement Agreement, the objectives of EPA and Respondent are: (a) for Respondent to conduct the work set forth in the Statement of Work for Soil Gas and Vapor Intrusion to Indoor Air Evaluation (attached hereto as Appendix A) ("SOW") and (b) for EPA to recover Future Response Costs it incurs with respect to the Respondent's implementation of the SOW and with respect to this Settlement Agreement.
- 10. The Work conducted under this Settlement Agreement is subject to approval by EPA and shall provide all appropriate and necessary information to assess Site conditions and evaluate alternatives to the extent necessary to select a remedy that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP"). Respondent shall conduct all Work under this Settlement Agreement in compliance with CERCLA, the NCP, and all applicable EPA guidances, policies, and procedures.

#### IV. DEFINITIONS

- 11. Unless otherwise expressly provided herein, terms used in this Settlement Agreement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:
- a. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, et seq.

- b. "Day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.
- c. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXVIII.
- d. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.
- e. "ADEQ" shall mean the Arizona Department of Environmental Quality and any successor departments or agencies of the State.
- f. "Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, verifying the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, Agency for Toxic Substances and Disease Registry ("ATSDR") costs, the costs incurred pursuant to Paragraph 53 (costs and attorneys fees and any monies paid to secure access, including the amount of just compensation), Paragraph 40 (emergency response), and Paragraph 83 (Work takeover).
- g. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.
- h. "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.
- i. "Operable Unit 1" or "OU1" shall mean that portion of the Motorola 52<sup>nd</sup> Street Superfund Site in Phoenix, Maricopa County, Arizona, that is bordered generally by 52<sup>nd</sup> Street to the east, 44th Street to the west, Roosevelt Street to the south, and Palm Lane to the north, and depicted generally on the map, attached as Appendix B.
- j. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.
  - k. "Parties" shall mean EPA and Respondent.
  - 1. "Settlement Agreement" shall mean this Administrative Settlement Agreement

and Order on Consent, the SOW, all appendices attached hereto (listed in Section XXVII) and all documents incorporated by reference into this document including without limitation EPA-approved submissions. EPA-approved submissions (other than progress reports) are incorporated into and become a part of the Settlement Agreement upon approval by EPA. In the event of conflict between this Settlement Agreement and any appendix or other incorporated documents, this Settlement Agreement shall control.

- m. "RCRA" shall mean the Resource Conservation and Recovery Act, also known as the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, et seq.
  - n. "Respondent" shall mean Freescale Semiconductor, Inc.
- o. "Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.
- p. "52<sup>nd</sup> Street Superfund Site" or "Site" shall mean the Motorola 52<sup>nd</sup> Street Superfund Site, listed on the EPA Superfund National Priorities List ("NPL") on October 4, 1989.
  - q. "State" shall mean the State of Arizona.
- r. "Statement of Work" or "SOW" shall mean the Statement of Work for development of a Soil Gas and Vapor Intrusion to Indoor Air Evaluation for Operable Unit 1 of the Site, as set forth in Appendix A to this Settlement Agreement. The Statement of Work is incorporated into this Settlement Agreement and is an enforceable part of this Settlement Agreement as are any modifications made thereto in accordance with this Settlement Agreement.
- s. "Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).
- t. "Work" shall mean all activities Respondent is required to perform under this Settlement Agreement, except those required by Section XIV (Retention of Records).

#### V. FINDINGS OF FACT

12. The 52<sup>nd</sup> Street Site was originally listed on the NPL following the discovery of contaminant releases to soil and groundwater from the Motorola Semiconductor Products Sector Plant ("Motorola Facility"), located on approximately 90 acres at 5005 East McDowell Road, in Phoenix, Arizona. The Motorola Facility was owned and operated by Motorola, Inc. ("Motorola") from 1956 until 1999. Contamination at the 52<sup>nd</sup> Street Site is primarily volatile organic compounds ("VOCs"), such as trichloroethylene ("TCE"), tetrachloroethylene ("PCE"),

- and 1, 1, 1 trichloroethane ("TCA"). Contamination and response actions being conducted from the Motorola Facility to approximately 44<sup>th</sup> Street are denoted as Operable Unit 1, or OU1.
- 13. In 1988, EPA and ADEQ selected an interim remedy for OU1 to address source areas at the Motorola Facility and to prevent continued groundwater contaminant migration by capturing groundwater at the Motorola Facility boundary and downgradient at 46<sup>th</sup> Street at the Old Crosscut Canal extraction wellfield. The area between the two OU1 groundwater extraction systems at the Motorola Facility and the Old Crosscut Canal extraction wellfield is predominantly a residential neighborhood with both residential and commercial buildings.
- 14. In 1989, Motorola entered into a Consent Order with ADEQ ("OU1 Consent Order") to implement the interim remedy. In 2004, Motorola transferred substantially all of its semiconductor sector to its former wholly-owned subsidiary, Freescale. In this transfer, Freescale agreed to indemnify Motorola for its environmental liability at the Site and has been implementing the interim remedy pursuant to the OU1 Consent Order for Motorola.
- 15. . Groundwater contaminant concentrations in the area between the two OU1 groundwater extraction systems remain above cleanup standards.
- 16. VOCs in soil gas, shallow groundwater, and bedrock have the potential to migrate from the subsurface up through preferential pathways and accumulate in indoor air in overlying buildings.
- 17. Motorola conducted 5 soil gas surveys (in 1984, 1985, 1989, 1991, and 1995) at locations on the Motorola Facility and in the residential neighborhoods between the two OU1 groundwater extraction systems. ADEQ also conducted a soil gas survey in the residential neighborhoods in 1992. The Arizona Department of Health Services (ADHS) conducted a 1992 Baseline Risk Assessment of the Motorola Facility and determined, based on the then-current understanding of TCE and PCE health risks, that both the indoor and outdoor air exposure pathway were below the risk level of 1E-6 for all locations.
- 18. Based on updated understanding of TCE and PCE health risks, in 2004-2005, Freescale evaluated the potential risk associated with indoor air exposure in OU1 based on the 1995 soil gas survey results and submitted to ADEQ a work plan to implement a soil vapor intrusion risk assessment for the residential neighborhoods. The SOW builds upon that work plan to complete a re-evaluation of the vapor intrusion to indoor air pathway in the residential neighborhoods in OU1.
- 19. Since the soil gas surveys conducted in the 1980s and 1990s, EPA has completed new draft health risk assessments of TCE (2001 and 2009) and PCE (2008). Using these draft TCE and PCE health risk assessments, indoor air Regional Screening Levels ("RSLs"), and vapor intrusion attenuation factors developed by the California Environmental Protection Agency, EPA Region 9 has developed health-based screening values to evaluate soil gas sample results at the 52<sup>nd</sup> Street Site. These screening values are called Motorola 52<sup>nd</sup> Street Human Health Screening Levels, or MHHSLs.

20. In the previous soil gas sampling events in the residential neighborhoods, VOCs were detected at a few locations, some at levels that exceed MHHSLs for TCE and PCE. Because groundwater conditions have changed and soil-gas sampling procedures and technologies have been revised and updated, further soil gas sampling and evaluation is needed to determine whether it is necessary to sample indoor air or to conduct response actions.

#### VI. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, EPA has determined that:

- 21. The Motorola 52<sup>nd</sup> Street Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- 22. The VOCs at the Site, as identified in the Findings of Fact above, include "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- 23. The conditions described in the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the facility as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
- 24. Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- 25. Respondent is a responsible party under Sections 104, 107 and 122 of CERCLA, 42 U.S.C. §§ 9604, 9607, and 9622.
- 26. The actions required by this Settlement Agreement are necessary to protect the public health, welfare or the environment, are in the public interest, 42 U.S.C. § 9622(a), and are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a).
- 27. EPA has determined that Respondent is qualified to conduct the Soil Gas and Vapor Intrusion to Indoor Air Evaluation within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondent complies with the terms of this Settlement Agreement.

#### VII. SETTLEMENT AGREEMENT

28. Based upon the foregoing Findings of Fact and Conclusions of Law and Determinations, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all appendices to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

#### VIII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS

- 29. Selection of Contractors, Personnel. All Work performed under this Settlement Agreement shall be under the direction and supervision of qualified personnel. Within 30 days of the Effective Date of this Settlement Agreement, and before the Work outlined below begins, Respondent shall notify EPA in writing of the names, titles, and qualifications of the personnel, including contractors, subcontractors, consultants and laboratories to be used in carrying out such Work. With respect to any proposed contractor, Respondent shall demonstrate that the proposed contractor has a quality system which complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995, or most recent version), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001 or subsequently issued guidance) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondent shall be subject to EPA's review, for verification that such persons meet minimum technical background and experience requirements. This Settlement Agreement is contingent on Respondent's demonstration to EPA's satisfaction that Respondent is qualified to perform properly and promptly the actions set forth in this Settlement Agreement. If EPA disapproves in writing of any person's technical qualifications, Respondent shall notify EPA of the identity and qualifications of the replacements within 30 days of the written notice. If EPA subsequently disapproves of the replacement, EPA reserves the right to terminate this Settlement Agreement and to conduct a complete Soil Gas and Vapor Intrusion to Indoor Air Evaluation, and to seek reimbursement for costs and penalties from Respondent. During the course of the Soil Gas and Vapor Intrusion to Indoor Air Evaluation, Respondent shall notify EPA in writing of any changes or additions in the personnel used to carry out such Work, providing their names, titles, and qualifications. EPA shall have the same right to disapprove changes and additions to personnel as it has hereunder regarding the initial notification.
- 30. Within 10 days after the Effective Date, Respondent shall designate a Project Coordinator who shall be responsible for administration of all actions by Respondent required by this Settlement Agreement and shall submit to EPA the designated Project Coordinator's name, address, telephone number, and qualifications. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site Work. EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number and qualifications within 10 days following EPA's disapproval. Respondent shall have the right to change its Project Coordinator, subject to EPA's right to disapprove. Respondent shall notify EPA 20 days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notification. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by Respondent. Documents to

be submitted to the Respondent shall be sent to:

Jenn McCall Strategic Programs Manager Freescale Semiconductor, Inc. MD-EL-614 2100 E. Elliot Road Tempe, AZ 85284

31. EPA has designated Janet Rosati of Region IX's Superfund Division as its Remedial Project Manager (RPM). EPA will notify Respondent of a change of its designated Project Coordinator. Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement as follows:

2 hard copies and 1 electronic copy to:

Janet Rosati, RPM
Arizona and Navajo Site Section SFD-6-2
Superfund Program, EPA Region IX
75 Hawthorne Street
San Francisco, CA 94105

Respondent shall also send copies of all work plans, reports, and other work related documents submitted to EPA to:

1 electronic copy to:
James Maes
US Army Corps of Engineers
3636 No. Central Ave., Suite 900
Phoenix, Arizona 85012
James.H.Maes@usace.army.mil

1 hard copy and 1 electronic copy to: Sue Kraemer Shaw Environmental, Inc. 1326 N. Market Street Sacramento, CA 95834 Sue.Kraemer@shawgrp.com

32. EPA's RPM shall have the authority lawfully vested in an RPM and an On-Scene Coordinator ("OSC") by the NCP. In addition, EPA's RPM shall have the authority consistent with the NCP, to halt any Work required by this Settlement Agreement, and to take any necessary response action when s/he determines that conditions at the Site may present an

immediate endangerment to public health or welfare or the environment. The absence of the EPA RPM from the area under study pursuant to this Settlement Agreement shall not be cause for the stoppage or delay of Work.

33. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the Soil Gas and Vapor Intrusion to Indoor Air Evaluation, as required by Section 104(a) of CERCLA, 42 U.S.C. Section 9604(a). Such person shall have the authority to observe Work and make inquiries in the absence of EPA, but not to modify the Soil Gas and Vapor Intrusion to Indoor Air Evaluation Work Plan.

#### IX. WORK TO BE PERFORMED

- 34. Respondent shall conduct the Soil Gas and Vapor Intrusion to Indoor Air Evaluation in accordance with the provisions of this Settlement Agreement, the SOW, CERCLA, the NCP and EPA guidance documents.
- 35. a. Respondent shall submit a Soil Gas and Vapor Intrusion to Indoor Air Evaluation Work Plan ("Work Plan") in accordance with the provisions of this Settlement Agreement and the SOW. The Work Plan shall be comprised of two phases. The first phase of the Work Plan shall consist of data collection to characterize subsurface conditions at or near residential and commercial buildings in the residential neighborhoods in OU1 to determine the nature and extent of the subsurface soil gas contamination, and to evaluate the risk to human health in the buildings overlying the contamination. Should the data in the first phase of the Work Plan indicate that indoor air sampling is necessary, the second phase of the Work Plan shall consist of vapor intrusion to indoor air evaluation including indoor air sampling of buildings overlying areas where subsurface soil gas contaminant levels are found above the MHHSLs. Upon request by EPA, Respondent shall submit in electronic form all portions of any plan, report or other deliverable Respondent is required to submit pursuant to provisions of this Settlement Agreement.
- b. <u>Schedule</u>. Within 15 days of the Effective Date of this Settlement Agreement, Respondent shall submit a detailed schedule for submittal of all deliverables required under this Settlement Agreement, for review and approval by EPA.

#### 36. Modification of the Work Plan.

a. If at any time during the Soil Gas and Vapor Intrusion to Indoor Air Evaluation process Respondent identifies a need for additional data, Respondent shall submit a memorandum documenting the need for additional data to the EPA RPM within 15 days of identification. EPA in its discretion will determine whether the additional data will be collected by Respondent and whether it will be incorporated into plans, reports and other deliverables.

- b. In the event of unanticipated or changed circumstances at the Site, Respondent shall notify the EPA RPM by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In the event that EPA determines that the immediate threat or the unanticipated or changed circumstances warrant changes in the Work Plan, EPA shall modify or amend the Work Plan in writing accordingly. Respondent shall perform the Work Plan as modified or amended.
- c. EPA may determine that in addition to tasks defined in the initially approved Work Plan, other additional Work may be necessary to accomplish the objectives of the Work. Respondent agrees to perform these response actions in addition to those required by the initially approved Work Plan, including any approved modifications, if EPA determines that such actions are necessary for a complete Soil Gas and Vapor Intrusion to Indoor Air Evaluation.
- d. Respondent shall confirm its willingness to perform the additional Work in writing to EPA within 7 days of receipt of the EPA request. If Respondent objects to any modification determined by EPA to be necessary pursuant to this Paragraph, Respondent may seek dispute resolution pursuant to Section XV (Dispute Resolution). The SOW and/or the Soil Gas and Vapor Intrusion to Indoor Air Evaluation Work Plan shall be modified in accordance with the final resolution of the dispute.
- e. Respondent shall complete the additional Work according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the Soil Gas and Vapor Intrusion to Indoor Air Evaluation Work Plan or written supplement thereto. EPA reserves the right to conduct the Work itself at any point, to seek reimbursement from Respondent, and/or to seek any other appropriate relief.
- f. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions at the Site.
- 37. Off-Site Shipment of Waste Material. Respondent shall, prior to any off-site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to EPA's RPM. However, this notification requirement shall not apply to any off-site shipments when the total volume of all such shipments will not exceed 10 cubic yards.
- a. Respondent shall include in the written notification the following information: (1) the name and location of the facility to which the Waste Material is to be shipped: (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. Respondent shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

- b. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, Respondent shall obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent shall only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.
- 38. Meetings. Respondent shall make presentations at, and participate in, meetings at the request of EPA during the initiation, conduct, and completion of the Soil Gas and Vapor Intrusion to Indoor Air Evaluation. In addition to discussion of the technical aspects of the Work, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion. EPA will consult with Respondent on scheduling prior to announcing meeting dates to the public when feasible.

#### 39. Reporting.

- a. In addition to the plans, reports and other deliverables set forth in this Settlement Agreement and SOW, during field work Respondent shall provide to EPA daily progress reports at the close of each field work day detailing the work conducted that day. Daily progress reports shall be submitted by electronic mail to the EPA RPM at rosati.janet@epa.gov, and also to James Maes at James.H.Maes@usace.army.mil and to Sue Kraemer at Sue.Kraemer@shawgrp.com.
- b. In addition to daily progress reports during field work, Respondent shall provide to EPA monthly progress reports by the tenth day of the following month. At a minimum, with respect to the preceding month, these progress reports shall (1) describe the actions which have been taken to comply with this Settlement Agreement during that month, (2) include all results of sampling and tests and all other data received by Respondent, (3) describe Work planned for the next two months with schedules relating such Work to the overall project schedule for Soil Gas and Vapor Intrusion to Indoor Air Evaluation completion, and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.
- c. Final Soil Gas Sampling Report and Vapor Intrusion to Indoor Air Evaluation Report: Within forty-five (45) days after Respondent's receipt of the final set of validated analytical soil gas data and forty-five (45) days after Respondent's receipt of the last set of validated analytical data from the second seasonal indoor air sampling, should that investigation be conducted, Respondent shall submit a draft Soil Gas Sampling Report and a draft Vapor Intrusion to Indoor Air Evaluation Report, respectively. These Reports shall summarize the soil gas and vapor intrusion to indoor air evaluation and other related actions taken to comply with this Agreement and will be submitted and drafted in accordance with SOW Sections 4.1.2 and

4.2.2. Respondent will revise these Reports in accordance with EPA comments and submit final reports for EPA review and approval within 30 days after receipt of EPA comments. The final Soil Gas Sampling Report and the Vapor Intrusion to Indoor Air Evaluation Report, if one is required, shall include the following certification signed by a person who supervised or directed the preparation of that report:

"Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Respondent shall submit a good faith estimate of total costs or a statement of actual costs incurred in complying with the Agreement within 45 days after submittal of either the Final Soil Gas Sampling Report or, if required, the Final Indoor Air Evaluation Report.

#### 40. Emergency Response and Notification of Releases.

a. In the event of any action or occurrence during performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify the EPA RPM or, in the event of his/her unavailability, the Regional Duty Officer at (415) 947-4400, of the incident or Site conditions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XVIII (Payment of Response Costs).

b. In addition, in the event of any release of a hazardous substance from the Site, Respondent shall immediately notify the EPA RPM, the OSC or Regional Duty Officer at (800) 300-2193 or (415) 947-4400 and the National Response Center at (800) 424-8802. Respondent shall submit a written report to EPA within 7 days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, et seq.

# X. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

- 41. After review of any plan, report or other item that is required to be submitted for approval pursuant to this Settlement Agreement, in a notice to Respondent EPA shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondent modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing Respondent at least one notice of deficiency and an opportunity to cure within 30 days, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects.
- 42. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Subparagraph 41(a), (b), (c) or (e), Respondent shall proceed to take any action required by the plan, report or other deliverable, as approved or modified by EPA subject only to its right to invoke the Dispute Resolution procedures set forth in Section XV (Dispute Resolution) with respect to the modifications or conditions made by EPA. Following EPA approval or modification of a submission or portion thereof, Respondent shall not thereafter alter or amend such submission or portion thereof unless directed by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Subparagraph 41(c) and the submission had a material defect, EPA retains the right to seek stipulated penalties, as provided in Section XVI (Stipulated Penalties).

#### 43. Resubmission.

- a. Upon receipt of a notice of disapproval, Respondent shall, within 20 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other deliverable for approval. Any stipulated penalties applicable to the submission, as provided in Section XVI, shall accrue during the 30-day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 44 and 45.
- b. Notwithstanding the receipt of a notice of disapproval, Respondent shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA. Implementation of any non-deficient portion of a submission shall not relieve Respondent of any liability for stipulated penalties under Section XVI (Stipulated Penalties).
- c. Respondent shall not proceed further with any subsequent activities or tasks until receiving EPA approval, approval on condition or modification of the following deliverables: Soil Gas and Vapor Intrusion to Indoor Air Evaluation Work Plan, Sampling and Analysis Plan, and Quality Assurance Project Plan. While awaiting EPA approval, approval on condition or modification of these deliverables, Respondent shall proceed with all other tasks and activities which may be conducted independently of these deliverables, in accordance with the schedule set forth under this Settlement Agreement.

- d. For all remaining deliverables not listed above in subparagraph 43.c., Respondent shall proceed with all subsequent tasks, activities and deliverables without awaiting EPA approval on the submitted deliverable. EPA reserves the right to stop Respondent from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the Soil Gas and Vapor Intrusion to Indoor Air Evaluation.
- 44. If EPA disapproves a resubmitted plan, report or other deliverable, or portion thereof, EPA may again direct Respondent to correct the deficiencies. EPA shall also retain the right to modify or develop the plan, report or other deliverable. Respondent shall implement any such plan, report, or deliverable as corrected, modified or developed by EPA, subject only to Respondent' right to invoke the procedures set forth in Section XV (Dispute Resolution).
- 45. If upon resubmission, a plan, report, or other deliverable is disapproved or modified by EPA due to a material defect, Respondent shall be deemed to have failed to submit such plan, report, or other deliverable timely and adequately unless Respondent invokes the dispute resolution procedures in accordance with Section XV (Dispute Resolution) and EPA's action is revoked or substantially modified pursuant to a Dispute Resolution decision issued by EPA or superseded by an agreement reached pursuant to that Section. The provisions of Section XV (Dispute Resolution) and Section XVI (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is not otherwise revoked, substantially modified or superseded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section XV, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XVI.
- 46. In the event that EPA takes over some of the tasks, but not the preparation of the Soil Gas Sampling Report or the Indoor Air Evaluation Report, Respondent shall incorporate and integrate information supplied by EPA into the final reports.
- 47. All plans, reports, and other deliverables submitted to EPA under this Settlement Agreement shall, upon approval or modification by EPA, be incorporated into and enforceable under this Settlement Agreement. In the event EPA approves or modifies a portion of a plan, report, or other deliverable submitted to EPA under this Settlement Agreement, the approved or modified portion shall be incorporated into and enforceable under this Settlement Agreement.
- 48. Neither failure of EPA to expressly approve or disapprove of Respondent's submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA. Whether or not EPA gives express approval for Respondent's deliverables, Respondent is responsible for preparing deliverables acceptable to EPA.

# XI. QUALITY ASSURANCE, SAMPLING, AND ACCESS TO INFORMATION

49. <u>Quality Assurance</u>. (a) Respondent shall assure that Work performed, samples taken and analyses conducted conform to the requirements of the SOW, the QAPP and guidances identified therein. Respondent will assure that field personnel used by Respondent are properly trained in the use of field equipment and in chain of custody procedures. Respondent shall only use laboratories which have a documented quality system that complies with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA.

Respondent shall follow, as appropriate, "Guidance for Quality Assurance Project Plans," (EPA QA/G-5, EPA/240/R-02/009), EPA Requirements for Quality Assurance Project Plans (EPA QA/R-5, EPA/240/B-01/003), U. S. EPA Environmental Response Team Standard Operating Procedures (SOP): 2105, "Indoor Air Assessment, Sampling and Monitoring Guidelines," and Standard Operating Procedure (SOP): 2012, "Soil Sampling," as guidance for QA/QC and sampling. Respondent and any laboratories used for the Work should have a documented Quality System that complies with ANSI/ISO/ASQ E-14001-2004 "Quality Systems for Environmental Data and Technology Programs – Requirements with Guidance for Use" (American National Standard Institute 2004, January 10, 2005), and "EPA Requirements for Quality Management Plans (QA/R-2) (EPA/240/B-01/002, March 2001)," or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program ("NELAP") as meeting the Quality System requirements.

#### 50. Sampling.

- a. All results of sampling, tests, modeling or other data (including raw data) generated by Respondent, or on Respondent's behalf, during the period that this Settlement Agreement is effective, shall be submitted to EPA in the next monthly progress report as described in Paragraph 39 of this Settlement Agreement. EPA will make available to Respondent validated data generated by EPA unless it is exempt from disclosure by any federal or state law or regulation.
- b. Respondent shall endeavor to verbally notify EPA at least 14 days, and in no event fewer than 7 days, prior to conducting significant field events as described in the SOW, the Work Plan, or Sampling and Analysis Plan. At EPA's verbal or written request, or the request of EPA's oversight assistant, Respondent shall allow split or duplicate samples to be taken by EPA and its authorized representatives of any samples collected in implementing this Settlement Agreement. All split samples of Respondent's shall be analyzed by the methods identified in the OAPP.

#### 51. Access to Information.

a. Respondent shall provide to EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to

activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Upon reasonable notice to Respondent, Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

- b. Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to EPA under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when it is submitted to EPA, or if EPA has notified Respondent that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondent. Respondent shall segregate and clearly identify all documents or information submitted under this Settlement Agreement for which Respondent asserts business confidentiality claims.
- c. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege in lieu of providing documents, it shall provide EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.
- d. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.
- 52. In entering into this Settlement Agreement, Respondent waives any objections to any data gathered, generated, or evaluated by EPA, the State, or Respondent in the performance or oversight of the Work that has been verified according to the quality assurance/quality control ("QA/QC") procedures required by the Settlement Agreement or any EPA-approved Work Plans or Sampling and Analysis Plans. If Respondent objects to any other data relating to the Work, Respondent shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within 15 days of either Respondent's submission of

the monthly progress report containing the data or Respondent's receipt of the data from EPA or the State.

#### XII. SITE ACCESS

- 53. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall use its best efforts to obtain all necessary access agreements within 60 days after the Effective Date, or as otherwise specified in writing by the EPA RPM. Respondent shall immediately notify EPA if after using its best efforts it is unable to obtain such agreements. For purposes of this Paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of access. Respondent shall describe in writing its efforts to obtain access. If Respondent cannot obtain access agreements, EPA may either (i) obtain access for Respondent or assist Respondent in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as EPA deems appropriate; (ii) perform those tasks or activities with EPA contractors; or (iii) terminate the Settlement Agreement. Respondent shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XVIII (Payment of Response Costs). If EPA performs those tasks or activities with EPA contractors and does not terminate the Settlement Agreement, Respondent shall perform all other tasks or activities not requiring access to that property, and shall reimburse EPA for all costs incurred in performing such tasks or activities. Respondent shall integrate the results of any such tasks or activities undertaken by EPA into its plans, reports and other deliverables.
- 54. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

#### XIII. COMPLIANCE WITH OTHER LAWS

55. Respondent shall comply with all applicable local, state and federal laws and regulations when performing the Work in the SOW. No local, state, or federal permit shall be required for any portion of any action conducted entirely on-Site, including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work is to be conducted off-Site and requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

#### XIV. RETENTION OF RECORDS

56. During the pendency of this Settlement Agreement and until 10 years after

commencement of the Work, Respondent shall preserve and retain all non-identical copies of documents, records, and other information (including documents, records, or other information in electronic form (excluding backup tapes typically used for recovery of data in the event of a disaster)) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Respondent shall also instruct its contractors and agents to preserve all documents, records, and other information of whatever kind, nature or description relating to performance of the Work until 10 years after commencement of the Work.

- 57. At the conclusion of this document retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such documents, records or other information, and, upon request by EPA, Respondent shall deliver any such documents, records, or other information to EPA. Respondent may assert that certain documents, records, and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, it shall provide EPA with the following: 1) the title of the document, record, or other information; 3) the name and title of the author of the document, record, or other information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or other information; and 6) the privilege asserted by Respondent. However, no documents, records or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.
- 58. Respondent hereby certifies individually that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. § 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

#### XV. DISPUTE RESOLUTION

- 59. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.
- 60. If Respondent objects to any EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, it shall notify EPA in writing of its objection(s) within 15 days of such action, unless the objection(s) has/have been resolved informally. EPA and Respondent shall have 90 days from EPA's receipt of Respondent's

written objection(s) to resolve the dispute (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA. Such extension may be granted verbally but must be confirmed in writing.

61. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, an EPA management official at the Assistant Director level or higher will issue a written decision. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondent's obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs, and regardless of whether Respondent agrees with the decision.

#### XVI. STIPULATED PENALTIES

62. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 63 and 64 for failure to comply with any of the requirements of this Settlement Agreement specified below unless excused under Section XVII (Force Majeure). "Compliance" by Respondent shall include completion of the Work under this Settlement Agreement or any activities contemplated under any Work Plan or other plan approved under this Settlement Agreement identified below, in accordance with all applicable requirements of law, this Settlement Agreement, the SOW, and any plans or other documents approved by EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement.

#### 63. Stipulated Penalty Amounts - Work.

a. The following stipulated penalties shall accrue per day for any noncompliance identified in Subparagraph 63(b):

Penalty Per Violation Per Day	Period of Noncompliance
\$ 1,500	1 <sup>st</sup> through 14 <sup>th</sup> day
\$ 2,500	15 <sup>th</sup> through 30 <sup>th</sup> day
\$ 5,000	31st day and beyond

### b. Compliance Milestones

i. Payment of Future Response Costs

- ii. Submittal of Draft and Final Soil Gas and Vapor Intrusion to Indoor Air Work Plan
- iii. Submittal of Draft and Final Field Sampling Plan
- iv. Submittal of Draft and Final Quality Assurance Project Plan
- v. Submittal of Draft and Final Soil Gas Sampling Report and Vapor Intrusion to Indoor Air Evaluation Report
- 64. <u>Stipulated Penalty Amounts Reports</u>. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate reports or other written documents pursuant to Paragraph 39(a) and (b):

Penalty Per Violation Per Day	Period of Noncompliance
\$ 750	1st through 14th day
\$ 1,500	15 <sup>th</sup> through 30 <sup>th</sup> day
\$ 3,000	31st day and beyond

- 65. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 83 of Section XX (Reservation of Rights by EPA), Respondent shall be liable for a stipulated penalty in the amount of \$150,000.
- 66. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (1) with respect to a deficient submission under Section X (EPA Approval of Plans and Other Submissions), during the period, if any, beginning on the 31<sup>st</sup> day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and (2) with respect to a decision by the EPA Management Official designated in Paragraph 61 of Section XV (Dispute Resolution), during the period, if any, beginning on the 31st day after the Negotiation Period begins until the date that the EPA Management Official issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.
- 67. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may give Respondent written notification of the same and describe the noncompliance. EPA may send Respondent a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondent of a violation.
- 68. All penalties accruing under this Section shall be due and payable to EPA within 30 days of Respondent's receipt from EPA of a demand for payment of the penalties, unless

Respondent invokes the dispute resolution procedures in accordance with Section XV (Dispute Resolution). All payments to EPA under this Section shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," shall be mailed to:

U.S. EPA
Fines and Penalties
Cincinnati Finance Center
P.O. Box 979077
St. Louis, MO 63197-1000

At the time of payment, Respondent shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID Number 09BE, the EPA Docket Number for this action, and the name and address of the party making payment. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s) shall be sent to EPA to:

Janet Rosati Remedial Project Manager U.S. Environmental Protection Agency, Region 9 75 Hawthorne Street (SFD-6-2) San Francisco, CA 94105

- 69. The payment of penalties shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement Agreement.
- 70. Penalties shall continue to accrue as provided in Paragraph 66 during any dispute resolution period, but need not be paid until 15 days after the dispute is resolved by agreement or by receipt of EPA's decision.
- 71. If Respondent fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 68.
- 72. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(1) of CERCLA, 42 U.S.C. § 9622(1), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil penalties pursuant to Section 122(1) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XX (Reservation of Rights by EPA), Paragraph 83.

Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

#### XVII. FORCE MAJEURE

- 73. Respondent agrees to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a *force majeure*. For purposes of this Settlement Agreement, *force majeure* is defined as any event arising from causes beyond the control of Respondent or of any entity controlled by Respondent, including but not limited to its contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondent's best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work or increased cost of performance.
- 74. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondent shall notify EPA orally within 48 hours of when Respondent first knew that the event might cause a delay. Within 7 days thereafter, Respondent shall provide to EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a *force majeure* event if it intends to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.
- 75. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Settlement Agreement that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

#### XVIII. PAYMENT OF RESPONSE COSTS

76. Payments of Future Response Costs.

a. Respondent shall pay EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, EPA will send Respondent a bill requiring payment that includes EPA's certified Agency Financial Management System summary data (SCORES Reports), or such other summary as certified by EPA. Respondent shall make all payments within 60 days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 78 of this Settlement Agreement. Respondent shall make all payments required by this Paragraph by a certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund," referencing the name and address of the party making payment and EPA Site/Spill ID number 09BE. Respondent shall send the check(s) to:

US Environmental Protection Agency Superfund Payments Cincinnati Finance Center PO Box 979076 St. Louis, MO 63197-9000

Alternatively, Respondent may make payments required by this Paragraph by Electronic Funds Transfer ("EFT") in accordance with EFT procedures to be provided to Respondent by EPA Region IX, and shall be accompanied by a statement identifying the name and address of the party making payment, OU1, and the name of the Motorola 52<sup>nd</sup> Street Superfund Site, the EPA Region (Region 9), Site/Spill ID Number 09BE, and the EPA docket number for this action.

b. At the time of payment, Respondent shall send notice that payment has been made to:

Janet Rosati Remedial Project Manager U.S. Environmental Protection Agency, Region 9 75 Hawthorne Street (SFD-6-2) San Francisco, CA 94105

- 77. The total amount to be paid by Respondent pursuant to Subparagraph 76.a. shall be deposited in the Motorola 52<sup>nd</sup> Street Site Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.
- 78. If Respondent does not pay Future Response Costs within 60 days of Respondent's receipt of a bill, Respondent shall pay Interest on the unpaid balance of Future Response Costs. The Interest on unpaid Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. If EPA receives a partial payment, Interest shall accrue on any unpaid balance. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of

Respondent's failure to make timely payments under this Section, including but not limited to, payments of stipulated penalties pursuant to Section XVI. Respondent shall make all payments required by this Paragraph in the manner described in Paragraphs 76 and 77.

79. Respondent may contest payment of any Future Response Costs under Paragraph 76 if it determines that EPA has made an accounting error or if it believes EPA incurred excess costs as a direct result of an EPA action that was inconsistent with the NCP. Such objection shall be made in writing within 60 days of receipt of the bill and must be sent to the EPA RPM. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondent shall within the 60 day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraphs 76 and 77. Simultaneously, Respondent shall establish an interest-bearing escrow account in a federallyinsured bank duly chartered in the State of Arizona and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the EPA RPM a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondent shall initiate the Dispute Resolution procedures in Section XV (Dispute Resolution). If EPA prevails in the dispute, within 5 days of the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraphs 76 and 77. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (plus associated accrued interest) for which it did not prevail to EPA in the manner described in Paragraphs 76 and 77. Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XV (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

#### XIX. COVENANT NOT TO SUE BY EPA

80. In consideration of the actions that will be performed and the payments that will be made by Respondent under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Future Response Costs. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon the complete and satisfactory performance by Respondent of all obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XVIII. This covenant not to sue extends only to Respondent and does not extend to any other person.

#### XX. RESERVATIONS OF RIGHTS BY EPA

- 81. Except as specifically provided in this Settlement Agreement, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.
- 82. The covenant not to sue set forth in Section XIX above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:
- a. claims based on a failure by Respondent to meet a requirement of this Settlement Agreement;
  - b. liability for costs not included within the definition of Future Response Costs;
  - c. liability for performance of response action other than the Work;
  - d. criminal liability;
- e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
- g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.

#### 83. Work Takeover.

a. In the event EPA determines that Respondent has (i) ceased implementation of any portion of the Work, or (ii) is seriously or repeatedly deficient or late in its performance of the Work, or (iii) is implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may issue a written notice ("Work Takeover Notice") to the Respondent. Any Work Takeover Notice issued by EPA will specify the grounds upon which such notice was issued and will provide Respondent a period of 10 days within which to remedy the circumstances giving rise to EPA's issuance of such notice.

- b. If, after expiration of the 10-day notice period specified in Paragraph 83.a, Respondent has not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, EPA may at any time thereafter assume the performance of all or any portions of the Work as EPA deems necessary ("Work Takeover"). EPA shall notify Respondent in writing if EPA determines that implementation of a Work Takeover is warranted under this Paragraph 83.a.
- c. Respondent may invoke the procedures set forth in Section XV (Dispute Resolution), Paragraph 60, to dispute EPA's implementation of a Work Takeover under Paragraph 83.b. However, notwithstanding Respondent's invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion commence and continue a Work Takeover under Paragraph 83.b until the earlier of (i) the date that Respondent remedies, to EPA's satisfaction, the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice or (ii) the date that a final decision is rendered in accordance with Section XV (Dispute Resolution), Paragraph 60, requiring EPA to terminate such Work Takeover. Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.
- d. After commencement and for the duration of any Work Takeover, EPA shall have immediate access to and benefit of any performance guarantee(s) provided pursuant to Section XXVI of this Settlement Agreement, in accordance with the provisions of Paragraph 98 of that Section. If and to the extent that EPA is unable to secure the resources guaranteed under any such performance guarantee(s) and the Respondent fails to remit a cash amount up to but not exceeding the estimated cost of the remaining Work to be performed, all in accordance with the provisions of Paragraph 98, any unreimbursed costs incurred by EPA in performing Work under the Work Takeover shall be considered Future Response Costs that Respondent shall pay pursuant to Section XVIII (Payment of Response Costs).

#### XXI. COVENANT NOT TO SUE BY RESPONDENT

- 84. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, or this Settlement Agreement, including, but not limited to:
- a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
- b. any claim arising out of the Work for which the Future Response Costs have or will be incurred, including any claim under the United States Constitution, the Arizona State Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

- c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work or payment of Future Response Costs.
- 85. These covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 82 (b), (c), and (e) (g), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.
- 86. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

#### XXII. OTHER CLAIMS

- 87. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent.
- 88. Except as expressly provided in Section XXI (Covenant Not To Sue By Respondent) and Section XIX (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.
- 89. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

#### XXIII. CONTRIBUTION

- 90. a. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C.§ 9613(f)(2), and that Respondent is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work and Future Response Costs.
- b. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B),

pursuant to which Respondent has, as of the Effective Date, resolved its liability to the United States for the Work and Future Response Costs.

c. Nothing in this Settlement Agreement precludes the United States or Respondent from asserting any claims, causes of action, or demands for indemnification, contribution, or cost recovery against any persons not parties to this Settlement Agreement. Nothing herein diminishes the right of the United States, pursuant to Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

#### XXIV. INDEMNIFICATION

- 91. Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorneys fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States.
- 92. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.
- 93. Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site.

#### XXV. INSURANCE

94. At least 15 days prior to commencing any On-Site Work under this Settlement Agreement, Respondent shall secure, and shall maintain for the duration of this Settlement

Agreement, comprehensive general liability insurance and automobile insurance with limits of \$2 million dollars, combined single limit, naming the EPA as an additional insured. Within the same period, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondent shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement Agreement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement Agreement. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

#### XXVI. FINANCIAL ASSURANCE

- 95. Within 30 days of the Effective Date, Respondent shall establish and maintain financial security for the benefit of EPA in the amount of \$200,000 in one or more of the following forms, in order to secure the full and final completion of Work by Respondent:
- a. a surety bond unconditionally guaranteeing payment and/or performance of the Work;
- b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA equaling the total estimated cost of the Work;
  - c. a trust fund administered by a trustee acceptable in all respects to EPA;
- d. a policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures the payment and/or performance of the Work;
- e. a corporate guarantee to perform the Work provided by one or more parent corporations or subsidiaries of Respondent, or by one or more unrelated corporations that have a substantial business relationship with Respondent; including a demonstration that any such company satisfies the financial test requirements of 40 C.F.R. Part 264.143(f); and/or
- f. a corporate guarantee to perform the Work by Respondent, including a demonstration that Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f).
- 96. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section

(including, without limitation, the instrument(s) evidencing such assurances) are inadequate, Respondent shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 95, above. In addition, if at any time EPA notifies Respondent that the anticipated cost of completing the Work has increased, then, within 30 days of such notification, Respondent shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondent's inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

- 97. If Respondent seeks to ensure completion of the Work through a guarantee pursuant to Subparagraph 95.e. or 95.f. of this Settlement Agreement, Respondent shall (i) demonstrate to EPA's satisfaction that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f); and (ii) resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, on the anniversary of the Effective Date, to EPA. For the purposes of this Settlement Agreement, wherever 40 C.F.R. Part 264.143(f) references "sum of current closure and post-closure costs estimates and the current plugging and abandonment costs estimates," the current cost estimate of \$200,000 for the Work at the Site shall be used in relevant financial test calculations.
- 98. The commencement of any Work Takeover pursuant to Paragraph 83 of this Settlement Agreement shall trigger EPA's right to receive the benefit of any Performance Guarantee(s) provided pursuant to Paragraph 95.a through f, and at such time EPA shall have immediate access to resources guaranteed under any such Performance Guarantee(s), whether in cash or in kind, as needed to continue and complete the Work assumed by EPA under the Work Takeover. If for any reason EPA is unable to promptly secure the resources guaranteed under any such Performance Guarantee(s), whether in cash or in kind, necessary to continue and complete the Work assumed by EPA under the Work Takeover, or in the event that the Performance Guarantee involves a demonstration of satisfaction of the financial test criteria pursuant to Paragraph 95.e, Respondent shall immediately upon written demand from EPA deposit into a special account within the Hazardous Waste Superfund or into such other account specified by EPA, in immediately available funds and without setoff, counterclaim, or condition of any kind, a cash amount up to but not exceeding the estimated cost of the remaining Work to be performed as of such date, as determined by EPA.
- 99. If, after the Effective Date, Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 95 of this Section, Respondent may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondent shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA. In the event of a dispute, Respondent may seek dispute resolution pursuant to Section XV (Dispute Resolution).

Respondent may reduce the amount of security in accordance with EPA's written decision resolving the dispute.

100. Respondent may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by EPA, provided that EPA determines that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondent may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

#### XXVII. INTEGRATION/APPENDICES

101. This Settlement Agreement and its appendices and any deliverables, technical memoranda, specifications, schedules, documents, plans, and reports (other than progress reports) that will be developed pursuant to this Settlement Agreement and become incorporated into and enforceable under this Settlement Agreement constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement:

"Appendix A" is the SOW.

"Appendix B is the map of OU1 of the 52<sup>nd</sup> Street Site.

# XXVIII. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

- 102. This Settlement Agreement shall be effective on the date it is signed by EPA.
- 103. This Settlement Agreement may be amended by mutual agreement of EPA and Respondent. Amendments shall be in writing and shall be effective when signed by EPA. EPA RPMs do not have the authority to sign amendments to the Settlement Agreement.
- 104. No informal advice, guidance, suggestion, or comment by the EPA RPM or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

#### XXIX. NOTICE OF COMPLETION OF WORK

105. When EPA determines that all Work has been fully performed in accordance with

this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including but not limited to payment of Future Response Costs and Record Retention, EPA will provide written notice to Respondent. If EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Soil Gas and Vapor Intrusion to Indoor Air Evaluation Work Plan if appropriate in order to correct such deficiencies, in accordance with Paragraph 36 (Modification of the Work Plan). Failure by Respondent to implement the approved modified Soil Gas and Vapor Intrusion to Indoor Air Evaluation Work Plan shall be a violation of this Settlement Agreement.

Partnerships, Land Revitalization, and Cleanup Branch

U.S. Environmental Protection Agency

Region 9

# Appendix A Statement of Work for Soil Gas and Vapor Intrusion to Indoor Air Evaluation

Operable Unit 1, Motorola 52<sup>nd</sup> Street Superfund Site

# 1. Introduction

This Statement of Work (SOW) describes the activities required to conduct the Soil Gas and Vapor Intrusion to Indoor Air Evaluation for the first operable unit (OU1) of the Motorola 52<sup>nd</sup> Street Superfund Site (Site) in Phoenix, Arizona. This SOW is to be implemented pursuant to the Administrative Order on Consent and Settlement Agreement (AOC) between the Environmental Protection Agency (EPA) and Freescale Semiconductor, Inc. (Freescale), issued under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The purpose of the Soil Gas and Vapor Intrusion to Indoor Air Evaluation is to determine whether volatile organic compounds (VOCs) in OU1 could be migrating from the subsurface into overlying buildings above health-based levels of concern.

The SOW includes the development of planning documents, the collection and analysis of soil gas samples and preparation of a soil gas sampling report. Based on the results of soil gas sampling, Respondent may also collect and analyze indoor, subslab and outdoor air samples, and prepare indoor air sampling reports.

# 1.1 Site Description

The Motorola 52<sup>nd</sup> Street Superfund Site is located in the City of Phoenix, Maricopa County, Arizona. The Site has been divided by EPA into three adjoining groundwater OUs: OU1, OU2, and OU3. OU1, approximately 1,000 acres, is the easternmost OU and contains the former Motorola 52<sup>nd</sup> Street Semiconductor Plant (Facility). The Facility is currently owned and operated by ON Semiconductor, Inc. The OU1 boundaries are 52<sup>nd</sup> Street to the east, Palm Lane to the north, Roosevelt Street to the south, and 44<sup>th</sup> Street to the west.

The Motorola Semiconductor Products Sector (Motorola) owned and operated the Motorola Facility from 1956 to 1999. As part of its electronics manufacturing operation, Motorola used solvents, including trichloroethene (TCE) and 1,1,1-trichoroethane (TCA), to clean and degrease parts and equipment. In 1982, a solvent leak was discovered in an underground storage tank at the facility. The 1983 Preliminary Investigation Report indicated that groundwater contamination was present at the Motorola Facility and to the west. The Preliminary Investigation Report also identified sources of contamination in the Courtyard, Acid Treatment Plant (ATP), and Southwest Parking Lot (SWPL) areas. In September 1988, ADEQ and EPA selected an interim remedy in the OU1 Record of Decision (1988 ROD) consisting of soils cleanup at the Motorola Facility and groundwater containment near 46<sup>th</sup> Street. On October 4, 1989, EPA placed the Motorola 52<sup>nd</sup> Street Superfund Site on the National Priorities List.

Motorola and Freescale have conducted 5 soil gas surveys that included locations on the Motorola Facility and in the residential neighborhood west of the facility. Surveys in 1984, 1985, 1989, 1991 and 1992 were conducted to estimate the approximate extent of VOCs in groundwater, identify potential VOC source areas, and gather design data for the Courtyard and SWPL SVE systems. The available soil gas data were also used by the Arizona Department of Health Services to evaluate the indoor and outdoor air exposure pathways as part of the 1992 Baseline Risk Assessment for the Motorola 52<sup>nd</sup> Street Facility. In 1995, soil gas sampling was conducted in the residential neighborhood to evaluate and update the previous work.

Freescale continues the operation of the groundwater treatment plant, completed in 1992 under ADEQ oversight, using air stripping and carbon adsorption. Freescale is currently conducting supplemental groundwater investigation work to support selection of a final OU1 remedy.

#### 1.2 Work to be Conducted

The Soil Gas and Vapor Intrusion to Indoor Air Pathway Evaluation will be performed consistent with the following guidance documents or their most recent updates: i) Draft Guidance for Evaluating the Vapor Intrusion Pathway to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance) USEPA, November 2002; ii) Draft Advisory – Active Soil Gas Investigations, California Environmental Protection Agency, March 2010 and iii) Interim Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, California Department of Toxic Substances Control, February 2005.

Respondent will conduct specified field work and will produce deliverables to EPA for review and approval in accordance with the Agreement, this SOW, and the guidance referenced in the AOC. Table 1 presents a summary of deliverables.

All work performed under the SOW will be under the direction and supervision of qualified personnel. All technical reports and other deliverables will be prepared under the direction and supervision of an Arizona Professional Engineer or Registered Geologist.

#### 1.2.1 Soil Gas Investigation

Two rounds of soil gas samples will be collected in the residential neighborhood between the Facility and the Old Crosscut Canal. Soil gas samples will be collected from shallow and deep sampling intervals at each location. The shallow sample will be collected from no less than five (5) feet (ft) below ground surface (bgs) and the deep sample will be collected from approximately fifteen (15) ft bgs or as adjusted based on field conditions. Soil gas data collected from both sampling rounds will be compared to the health-based screening values to be developed for the Site, the Motorola Human Health Screening Levels (MHHSLs). If the observed soil gas concentrations from both soil gas sampling events are below MHHSLs, then no

further work is necessary at those locations. If soil gas concentrations in any soil gas sample location on the perimeter of the study area exceed MHHSLs in either sampling event, Respondent will assume a distance of 100 feet outward from that location, or as permitted by access or obstructions, and collect step out samples until validated soil gas results from the step out locations are below MHHSLs. With EPA approval, Respondent may also collect step out samples from a soil gas sampling location within the interior of the study area where soil gas concentrations exceed MHHSLs. Respondent will use validated soil gas data to define the borders of an area of interest for a potential indoor air investigation. Within 15 days of Respondent's receipt of validated soil gas results establishing the borders of the area of interest, Respondent will develop an inventory of all buildings overlying the area of interest and make a recommendation of whether an indoor air investigation should be performed in the defined area(s). Following review of Respondent's recommendation and other relevant information, EPA will determine in which buildings an indoor air investigation is warranted.

#### 1.2.2 Indoor Air Investigation

At any time during the soil gas investigation following receipt of validated data indicating soil gas level(s) exceeding MHHSLs, EPA may direct Respondent to initiate work pursuant to Section 2.2 of this SOW. An indoor air investigation will include indoor and outdoor air sampling and subslab sampling. Two indoor air investigation sampling events will be conducted, one in a hot and one in a cold season. The indoor air data collected will be compared to EPA's residential Regional Screening Levels (RSLs), the Agency for Toxic Substances and Disease Registry (ATSDR) Minimal Risk Levels (MRLs), and the outdoor air sampling results.

# 2.0 Soil Gas and Indoor Air Investigation Work Plans

# 2.1. Soil Gas Sampling Work Plan

Respondent will prepare and submit to EPA a draft Soil Gas Investigation Work Plan to conduct the Work described in Section 1.2.1 above within 30 days of the Effective Date of the Agreement. Copies will be submitted in accordance with the Agreement. Specifically, the Work Plan will present the following:

- A background summary of the Site.
- Respondent's technical and management approach to each task to be performed, including a detailed description of each task; the assumptions used; the identification of any technical uncertainties (with a proposal for the resolution of those uncertainties); the information needed for each task; any information to be produced during and at the conclusion of each task; and a description of the work products that will be submitted to

EPA. Respondent will identify any contractors or subcontractors it plans to use to accomplish all or part of a task's objectives.

- A schedule of specific dates and timeframes for the start and completion of each required activity and submission of each deliverable required by the SOW. The schedule will also include information about timing, initiation, and completion of all critical path milestones for each activity and deliverable.
- Respondent's approach to data management to address requirements for project management systems, including tracking, storing, and retrieving data

Respondent will revise the draft Work Plan according to EPA comments and submit a final Work Plan for EPA review and approval. The final Work Plan is due within 20 days of receipt of EPA comments. A summary of other Deliverables pursuant to this SOW and due dates are included as Table 1.

## 2.2. Indoor Air Investigation Work Plan

If, pursuant to Section 1.2.2 of this SOW, EPA has determined that a vapor intrusion to indoor air evaluation is required, Respondent will prepare and submit to EPA a draft Indoor Air Investigation Work Plan to conduct indoor air, outdoor air and subslab sampling. The draft Indoor Air Evaluation Work Plan will be submitted to EPA within 45 days of Respondent's receipt of EPA's determination that such an evaluation is required. Copies will be submitted in accordance with the Agreement. Specifically, the Indoor Air Investigation Work Plan will present the following:

- A background summary of the Site.
- Respondent's technical and management approach to each task to be performed, including a detailed description of each task; the assumptions used; the identification of any technical uncertainties (with a proposal for the resolution of those uncertainties); the information needed for each task; any information to be produced during and at the conclusion of each task; and a description of the work products that will be submitted to EPA. Respondent will identify any contractors or subcontractors it plans to use to accomplish all or part of a task's objectives.
- A schedule of specific dates and timeframes for the start and completion of each required activity and submission of each deliverable required by the SOW. The schedule will also include information about timing, initiation, and completion of all critical path milestones for each activity and deliverable.

 Respondent's approach to data management to address requirements for project management systems, including tracking, storing, and retrieving data

Respondent will revise the draft Work Plan according to EPA comments and submit a final Work Plan for EPA review and approval. The final Work Plan is due within 30 days of receipt of EPA comments. A summary of other Deliverables pursuant to this SOW and due dates are included as Table 1.

#### 3.0 SITE-SPECIFIC PLANS

# 3.1 Field Sampling Plan and Quality Assurance Project Plan

# 3.1.1. Soil Gas Sampling Field Sampling Plan and Quality Assurance Project Plan and Field Sampling Plan

Respondent will submit a Soil Gas Sampling Quality Assurance Project Plan (QAPP) and Field Sampling Plan (FSP), which will be incorporated into the Soil Gas Sampling Work Plan. The draft Soil Gas Sampling QAPP and FSP are due along with the Work Plan within 30 days of the Effective Date of the Agreement.

Respondent will revise the draft Soil Gas Sampling FSP and QAPP according to EPA comments and submit final plans for EPA review and approval. The final Soil Gas Sampling FSP and QAPP are due within 30 days of receipt of EPA comments.

Health and Safety Plan: Respondent will submit a site-specific Health and Safety Plan (HASP) for soil gas sampling. The HASP for the Site must specify how workers will be protected during any field activities through the identification, evaluation, and control of health and safety hazards. The HASP must also provide an emergency response plan describing how to handle potential emergencies and how to minimize the risks associated with a response. The HASP must also address health and safety requirements for site visitors. The HASP is due within 30 days of the Effective Date of the Agreement. EPA does not provide "approval" of HASPs. Each employer, contractor, and subcontractor is responsible for ensuring that workers follow applicable Federal and State worker health and safety regulations.

# 3.1.2. Indoor Air Investigation QAPP and FSP

If it is determined pursuant to Section 1.2.2. of this SOW that a vapor intrusion to indoor air evaluation is necessary, Respondent will submit a revised QAPP and FSP for indoor air, outdoor air, and subslab sampling which will be incorporated into the Indoor Air Investigation Work Plan. The draft Indoor Air Sampling QAPP and FSP are due along with the draft Indoor Air Investigation Work Plan.

Respondent will revise the draft Indoor Air Investigation FSP and QAPP according to EPA comments and submit final plans for EPA review and approval. The final Indoor Air Investigation FSP and QAPP are due within 30 days of receipt of EPA comments.

If it is determined pursuant to Section 1.2.2 of the SOW that a vapor intrusion to indoor air evaluation is required, Respondent will submit a site-specific HASP for indoor air sampling. The HASP for the indoor air investigation must specify how workers will be protected during any field activities through the identification, evaluation, and control of health and safety hazards. The HASP must also provide an emergency response plan describing how to handle potential emergencies and how to minimize the risks associated with a response. The HASP must also address health and safety requirements for site visitors. The HASP is due along with the Draft Indoor Air Sampling Work Plan. EPA does not provide "approval" of HASPs. Each employer, contractor, and subcontractor is responsible for ensuring that workers follow applicable Federal and State worker health and safety regulations.

#### 4.0 DATA ACQUISITION AND REPORT PREPARATION

Data acquisition starts with EPA approval of the FSP and QAPP, and ends with the demobilization of field personnel and equipment from the Soil Gas and Vapor Intrusion to Indoor Air Pathway Evaluation effort. Respondent will perform the following field activities for soil gas sampling, and if necessary indoor air, outdoor air and subslab sampling in accordance with the EPA-approved Work Plan, FSP, and QAPP developed pursuant to Sections 2.0 and 3.0.

# 4.1 Conduct Soil Gas Sampling

Soil gas samples will be collected pursuant to the AOC, Section 1.2.1 of this SOW, and in accordance with the EPA approved Soil Gas Sampling Work Plan, FSP, and QAPP.

# 4.1.1 Soil Gas Mobilization, Access and Permitting

Respondent will comply with the substantive requirements of all applicable local, state and federal permitting for on-site actions and all requirements for off-site actions. Prior to mobilizing for field efforts, property owners and occupants will be contacted to obtain access, where necessary, for soil gas sampling.

# 4.1.2 Soil Gas Sampling Report

Within 45 days after receipt of the last set of validated analytical soil gas data, Respondent will submit a draft Soil Gas Sampling Report describing, at a minimum, the methods and procedures used for collecting the soil gas samples, field documentation, information on the sampling and analysis methods used, analytical results, and data quality assessment.

If it is determined that additional data would be beneficial to complete the evaluation, the Soil Gas Sampling Report will include a Technical Memorandum describing the recommended additional data collection activities.

Respondent will revise the draft Soil Gas Sampling Report according to EPA comments and submit a final report for EPA review and approval. The final report is due 30 days after receipt of EPA comments.

## 4.2. Conduct Indoor Air Sampling

If it is determined pursuant to Section 1.2.2 that a vapor intrusion to indoor air evaluation is required, then indoor air, outdoor air, and subslab samples will be collected pursuant to the AOC, Section 1.2.2 of this SOW, and in accordance with the EPA approved Indoor Air Investigation Work Plan, FSP, and QAPP.

## 4.2.1. Mobilization, Access and Permitting

Respondent will comply with the substantive requirements of all applicable local, state and federal permitting for on-site actions and all requirements for off-site actions. Prior to mobilizing for field efforts, property owners and occupants will be contacted to obtain access, where necessary, for indoor air sampling.

# 4.2.2 Vapor Intrusion to Indoor Air Evaluation Report

Within 45 days after receipt of the last set of validated analytical indoor air data for the second seasonal sampling event, Respondent will submit a draft Vapor Intrusion to Indoor Air Evaluation Report describing, at a minimum, the methods and procedures used for collecting the indoor air samples, field documentation, information on the sampling and analysis methods used, analytical results, and data quality assessment.

If it is determined that additional data would be beneficial to complete the evaluation, the report will include a Technical Memorandum describing additional recommended data collection activities.

Respondent will revise the Vapor Intrusion to Indoor Air Evaluation Report according to EPA comments and submit a final report for EPA review and approval. The final report is due 30 days after receipt of EPA comments.

# 5.1 Notification of Initiation of Field Work and Notification of Completion of Field Work

Respondent will endeavor to notify EPA with a Notification of Initiation of Field Work at least fourteen (14) days and will notify EPA in no event fewer than seven (7) days prior to initiating any physical work in the field. The Notification will include the planned dates for field activities so that EPA may adequately schedule oversight tasks. Respondent will notify EPA in writing within five (5) days of completion of field work activities, with a Notification of Completion of Field Work. Upon submission of the Notification of Initiation of Field Work, Respondent will provide Daily Field Activity Reports in accordance with the requirements in the AOC. Daily Field Activity Reports may be discontinued upon Notification of Completion of Field Work.

# 5.2 Daily Field Activity Reports

In accordance with the AOC, Respondent will submit Daily Field Activity Reports to EPA during the time that Respondent is conducting field work. At a minimum, these Daily Field Activity Reports will: (1) describe the actions which have been taken to comply with the AOC during that day; (2) include all results of sampling and tests and all other data received by Respondent; (3) describe work planned for the next day with schedules relating such work to the overall project schedule; and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

The Daily Field Activity Reports will be submitted via electronic mail and are due at the close of each field work day.

# 5.3 Monthly Progress Reports

In accordance with the AOC, Respondent will provide Monthly Progress Reports. At a minimum, these progress reports will: (1) describe the actions during that month; (2) include all results of sampling and tests and all other data (both validated and unvalidated) received by Respondent; (3) describe work planned for the next two months with schedules relating such work to the overall project schedule; and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

The Monthly Progress Reports will be submitted via electronic mail and are due on the 10<sup>th</sup> day of each month for the preceding month's work.

# 6.0 Investigation -Derived Waste Disposal

Investigation-Derived Waste (IDW) includes liquid waste from equipment decontamination and personal protective equipment. IDW will be contained pending characterization and disposal. Respondent will comply with the requirements as set forth in the AOC for Off-Site Shipment of Waste Material.

# 7.0 Sample Analysis

Respondent will arrange for and carry out the environmental analyses of samples collected for the previous tasks, in accordance with the FSP and QAPP. The sample analysis task begins with Respondent arranging the sample analysis work with a state-accredited or National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and completing the field sampling program. The task ends with Respondent verifying that the laboratory completed the requested analyses, submitted all sample data packages for third party validation, and submitted data to EPA. For the purposes of this SOW, "third party" is defined as any party other than the entity performing the laboratory analysis.

## 8.0 Data Validation

Respondent will arrange for and carry out third party validation of the analytical data received from the laboratory during the previous tasks, in accordance with the EPA-approved FSP and QAPP. The sample validation task begins with Respondent transmitting all sample data packages received from the laboratory to the third party validator for validation in accordance with EPA's National Functional Guidelines for Data Review and applicable method quality control standards. This task ends with Respondent providing EPA with data validation reports.

# 9.0 Community Involvement

At any point during the Soil Gas and Vapor Intrusion to Indoor Air Evaluation, Respondent may be requested to provide support to EPA in preparation and dissemination of fact sheets, flyers, power point presentations, and other audiovisual materials designed to apprise the community of current or proposed activities.

Table 1
Summary of Deliverables
Motorola 52<sup>nd</sup> Street Superfund Site OU1 Study Area

TASK	DELIVERABLE	NO. of COPIES	DUE DATE
2.1	Draft Soil Gas Sampling Work Plan	3	30 days after Effective Date of AOC
2.1	Final Soil Gas Sampling Work Plan	3	20 days after receipt of EPA comments
2.2	Draft Indoor Air Investigation Work Plan	3	Within 45 days of receipt of EPA's determination that a vapor intrusion to indoor air evaluation is required
2.2	Final Indoor Air Investigation Work Plan	3	30 days after receipt of EPA comments
3.1.1	Draft Soil Gas Sampling Field Sampling Plan	3	Included with Draft Soil Gas Sampling Work Plan (due 30 days after Effective Date of AOC)
3.1.1	Final Soil Gas Sampling Field Sampling Plan	3	20 days after receipt of EPA comments
3.1.1	Draft Soil Gas Sampling Quality Assurance Project Plan	3	Included with Soil Gas Sampling Work Plan (due 30 days after Effective Date of AOC)
3.1.1	Final Soil Gas Sampling Quality Assurance Project Plan	3	20 days after receipt of EPA comments
3.1.1.	Health and Safety Plan for Soil Gas Sampling	3	30 days after Effective Date of AOC
3.1.2	Draft Indoor Air Investigation Field Sampling Plan	3	Included with Draft Indoor Air Investigation Work Plan (due within 45 days of receipt of EPA's determination that a vapor intrusion to indoor air evaluation is required)
3.1.2	Final Indoor Air Investigation Field Sampling Plan	3.	30 days after receipt of EPA comments
3.1.2	Draft Indoor Air Investigation Quality Assurance Project Plan	3	Included with Draft Indoor Air Investigation Work Plan (due within 45 days of receipt of EPA's determination that a vapor intrusion to indoor air evaluation is required)
3.1.2.	Final Indoor Air Investigation Quality Assurance Project Plan	3	30 days after receipt of EPA comments
3.1.2	Health and Safety Plan for Indoor Air Investigation	3	Included with Draft Indoor Air Investigation Work Plan (due within 45 days of receipt of EPA's determination that a vapor intrusion to indoor air evaluation is required)
4.1.2 and 4.2.2	Technical Memorandum documenting need for additional data (if needed)	3	30 Days after identification of need for additional data
4.1.2	Draft Soil Gas Sampling Report	3	45 days after receipt of last set of validated soil gas data
4.1.2	Final Soil Gas Sampling Report	3	30 days after receipt of EPA comments
4.2.2	Draft Vapor Intrusion to Indoor Air Evaluation Report	3	45 days after receipt of last set of validated indoor air data forthe second seasonal sampling event
4.2.2.	Final Vapor Intrusion to Indoor Air Evaluation	3	30 days after receipt of EPA comments

	Report		
5.1	Notification of Initiation of Field Work	3	Endeavor at least 14, but in no event fewer than 7 days in advance of Field Work
5.1	Notification of Completion of Field Work	3	Within 5 days after completion of Field Work
5.2	Daily Field Activity Progress Reports	Electronic to team	Daily while field work is being conducted
5.3	Monthly Progress Reports	Electronic to team	10th day of the following month